Hernia-Basic-Rwanda - March 2017

Report of a humanitarian Mission March 2nd till March 10th 2017

Ralph Lorenz

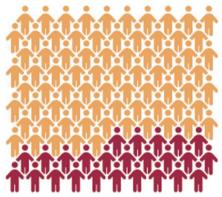


After the first humanitarian missions in February 2013 with two teams (Nyamata and Remera Rukomal) a second in February 2014 with overall four teams (Gahini, Kilinda, Nyamata and Remera Rukoma) and a third in February 2016 with overall 6 teams (Gahini, Kigeme, Kilinda, Nyamata, Remera Rukoma and Rwamagana) this year a huge British and German Team with 32 volunteer doctors, nurses came to five hospitals in Rwanda.

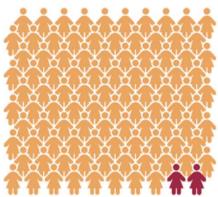
Such a mission would not have been possible without the outstanding and selfless engagement of the whole team of volunteer surgeons, anaesthetists and nurses. An overwhelming thanks needs to be given furthermore to *Brussels Airlines* which once again supported the booking/rebooking and realization of the transport generously and uncomplicated. In preparation of this mission Pastor Osee Ntavuka of the relief organization *Rwanda Legacy of Hope* planned together with Dr. Chris Oppong (*OperationHernia*) our mission and overcome all the burocratic hurdles. We are deeply thankful to both supporters and their staff. We also like to give a warmhearted thank to the ambassador of Rwanda in Germany, His Excellence Mr. Igor Cesar and the whole team of the Rwandan Embassy in Germany for their constructive and helpful support of our project! Last not least without the generous support of a numerous private and commercial donations this project could never happened.

What is the medical background for this humanitarian project?

Hernias are one of the most common surgical diseases. The most common location of these hernias is the groin area. Males are even much more affected than women.



Out of every 100 men, 25 will have an inguinal hernia sometime during their lifetime.



Out of every 100 women, 2 will have an inguinal hernia sometime during their lifetime.

Many hernia patients have only minor clinical symptoms, but if the hernia gets larger it can evoke significant problems and severe complications that can also lead to an inability to work.

Relevant differences exist in the surgical treatment of hernias worldwide. In Europe and North-America are enough capacities to operate all hernia patients, but in most African countries only a very small part of symptomatic patients (less than 10%) are normally treated.

Since more than 20 years a mesh based repair of hernias has established and is recommended by the international evidence based guidelines. But in some specific situations a pure tissue repair is very reasonable.

In most African hospitals hernia meshes are not constantly available. It also seems indicated that African hernias should not be compared to European. There are significantly more emergency cases sometimes with incarcerations in some cases of the intestine. Many young patients have often untreated, uncomplicated, indirect hernias since their childhood. In both constellations a pure tissue repair without hernia meshes is an excellent alternative, even on European standards

Comparing to the amount of specialized surgeons in Europe and North-America to Africa, the situation in Africa looks dramatically. Only a hundredth (comparing to European numbers) of surgeons have to care in Africa not only surgical patients but furthermore they have to treat also gynecological, urological, trauma and orthopedic patients.

Because of this background in many African countries the specific medical training of the local doctors is getting more and more important.

This year the two aid organizations OperationHernia and Surgeons for Africa have prepared in close collaboration with Rwanda Legacy of Hope a second central Hernia-Basic-Workshop. The Rwandan Ministry of Health, the University CHUK in Kigali and the Provincial Hospital in Rwamagana supported this second Hernia-Basic-Course. This training was certified once again by the Rwandan Medical and Dental Council with 35 CPD credits.

With the Help of the Rotary foundation a hernia education center was already in 2016 established at the Provincial Hospital in Rwamagana for the sustainability of this project.

The **second Rwandan central Hernia-Basic-Workshop** was given due to governmental decision firstly to the University CHUK in Kigali. 17 Rwandan resident surgeons participated. After the two-day theoretical workshop a practical hands-on-training for one week started for each seven residents at CHUK in Kigali and at the Provincial Hospital in Rwamagana. In 3 further district hospitals (Gahini, Kigeme and Kilinda) the other 3 residents were trained in the field of hernia surgery.



The Basics of Hernia Surgery were taught in the first two days with lectures on Epidemiology of hernia diseases in Ruanda, the Anatomy of hernias and Basic principles of hernia-repairtechniques. Dr. George Ntakiyiruta from Kigali, Dr. Chris Oppong from Plymouth, Dr. David Sedgwick from Fort Williams, Dr. Albrecht Frunder from Tübingen and Dr. Ralph Lorenz from Berlin gave different state of the art lectures during this workshop. One of the most important parts of the workshop was the training of two standardized operation techniques of groin hernias. As Pure-Tissue-Repair the SHOULDICE-Technique and as Mesh-Technique the LICHTENSTEIN-Technique was trained.

Besides this knowledge transfer a lot of equipment was transported to remain in Rwanda. The Majority of the 32-men/women-German-British Crew arrived together with more than 30 boxes with surgical and anaesthesiological equipment on Saturday March 4th, 2017 in Kigali. The medical technician Volker Jodenschwager was once again part of the team and firstly the filmmaker Felix Vollmann, a German who is based in Nairobi in Kenia and works

for the United Nations. Mr. Vollmann will produce a short documentary about this project with the working title "Participatience".

The Rwandan Media response to our mission was enormous: Television as well as Newspapers reported during the training on several occasions.





During the practical part of this Hernia-Basic-Workshop 17 residents were trained for one week at 5 different hospitals in Rwanda. Every trainee had a chance to operate during this workshop more than five different hernia cases themselves or under our supervision so that practical training and theoretical lectures were finally well balanced. Every part of the Course was evaluated. All participants got finally an access to an external data platform with teaching videos, with all presentations of the course, selected scientific papers and other informations.



The all over statistic results in all hospitals with German participation showed an outcome of 98 Operations on 80 patients within five days. 81 Hernia operations were done with different operation techniques. Most of the patients were operated in spinal anaesthesia but some also in local. All operations were finished without any complications and every patient was discharged from hospital during our stay.

Shortly to our departure I got a chance to meet up the current Rwandan Minister of Health Ms. Dr. Diane Gashumba to introduce our hernia education project for Rwanda.

After this labor intensive one and a half week the whole German Team was able to enjoy the beauty of the country with a short roundtrip through Rwanda at Lake Kivu and visited afterwards either in the Volcanoes- or in the Akagera-National Park.

Once again we experienced a huge variety of positive impressions during this humanitarian work in Ruanda. One step further we had the chance to develop a sustainable surgical education project for Rwanda.

Comments on 1 1
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-It is very well structured program with very interesting lectures and I am very easer to start the hands-on boot so that I can apply that in my daily practice. Thank you to renew apply that in my daily practice. Thank you to renew my enthusias in the second my mand.

Feed back comment of a participant: "...thank you for renew my enthusiasm and broaden my mind..."

One of the most impressive experiences in Rwanda was the enthusiasm and the thirst of knowledge of all the participating trainees. Within two weeks a very personal and cooperative partnership was developed.

We are looking forward to come back to Rwanda!

Ralph Lorenz for the German Team